## LOG OF MEETING

**SUBJECT:** Discussion of various electrical and fire topics with the staff of Underwriters Laboratories Inc.

**DATE:** April 15, 1999

PLACE: Room 410B/C

East West Towers

DATE OF LOG ENTRY: April 29, 1999

SOURCE OF LOG ENTRY: William H. King, Jr., ESEE 2 MCC

## **CPSC PARTICIPANTS:**

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Products Identified

Excepted by

Firms Notified,

Comments Processed

CPSC/OFFICE OF THE SECRETARY

## **NON-CPSC PARTICIPANTS:**

James Beyreis, Underwriters Laboratories Inc. (UL) John Drengenberg, UL Gordon Gillerman, UL

## **SUMMARY:**

This meeting between the CPSC staff and staff members of Underwriters Laboratories was for the purpose of reviewing the overall status of product safety topics of mutual interest, and not for the purpose of in-depth technical discussions of each topic. Fifteen topics were covered at the meeting. A meeting agenda is attached.

A brief synopsis of the outcome of each topic is noted below.

Countertop Cooking Appliances - CPSC staff reviewed the status of upgrading the UL voluntary safety standard for several small kitchen appliances. CPSC staff indicated that there was verbal agreement reached with CPSC staff at last November's UL Technical Advisory Panel (TAP) for a new performance test for automatic pop-up toasters, but that the draft UL proposal has not, to date, been received. UL staff indicated that they would check on the status. For deep fat fryers, CPSC staff noted that it had completed an evaluation of a two-part, magnetic type appliance connector and found this technology promising with regard to disconnecting the power cord from a deep fat fryer if the cord was pulled such that a burn hazard might occur from the spillage of hot cooking oil. CPSC staff and UL staff agreed that the two organizations would proceed expeditiously to develop a draft performance test to assess a breakaway cord feature for deep fat fryers. Regarding toaster-ovens and toaster-oven/broilers, CPSC staff indicated that they were awaiting alternative proposals from UL with regard to the performance test proposed by CPSC staff in which operating controls would be by-passed and the appliance operated while in contact with an ignition indicator such as newspaper. UL indicated at last November's TAP meeting that an alternative proposal for requirements for more reliable operating controls was being considered, but that UL will advance both proposals for comment and possible adoption. Since no proposals from UL have been received to date, UL staff at the meeting indicated that they would review this situation with their engineers and advise the CPSC staff accordingly.

Clothes Dryers – CPSC staff indicated that they completed testing both gas and electric clothes dryers, and were in the process of locating and examining field incident samples involved in fires to gain more information about the mechanisms of failure that result in the risk of fire with these appliances. After completion of the current work, it may be appropriate to communicate with the standards developers and manufacturers to discuss the staff findings.

Arc Fault Circuit Interrupters – CPSC staff indicated that its assessment of this technology continues to indicate that incorporating devices that provide arc fault protection in home wiring will reduce the incidence of fires proceeded by arcing conditions. UL staff indicated that their standard for this product would be issued shortly. Both CPSC and UL staffs indicated a willingness to work together and with others to form partnerships to acquaint the public about these devices. Presently, CPSC

staff is aware of four circuit breaker manufacturers that are producing products that incorporate arc-fault circuit interrupter technology.

**Battery-Operated Ride-On Toys** – CPSC staff reviewed some technical information with the UL staff which the CPSC staff learned about during its investigation which led to recalls of these products over the past year. The toy products come with UL listed battery chargers. One potential failure mechanism relates to the chargers and involves a short circuit within the DC output wires of the charger which can receive electrical energy under fault conditions that is back fed from the battery. The energy from the battery could be sufficient to rapidly overheat these wires and represent a potential fire hazard. UL staff indicated that they are looking into this matter.

Electric Blankets – At last year's technical meeting with UL, CPSC staff requested from UL their specific requirements for positive temperature coefficient (PTC) heating elements. UL indicated at this year's meeting that an announcement had been issued which contained these requirements, and that they would provide CPSC staff with a copy of the announcement.

**Portable Lamps** – CPSC staff indicated their concern that halogen torchiere lamps were being replaced in the marketplace to some extent with torchiere lamps rated to accept 150 watt incandescent bulbs which can present a similar fire hazard when foreign materials come in contact with the heat from the bulb. CPSC staff recently sent UL a letter requesting that the 20-layer cheesecloth drape test, presently applicable only to lamps equipped with tubular halogen bulbs, also be applicable to lamps with incandescent bulbs. In particular, lamps with shallow, open-at-the-top shades intended for use with the medium, Edison-base bulbs arranged with the base in the downward position were observed and evaluated by CPSC staff.

Washing Machines – CPSC staff voiced their concern regarding the stop time for the spinning agitator of these machines when the door or cover is opened, which could result in a casualty injury to consumers.

Table Saws – CPSC staff recently voiced concerns regarding the adequacy of the current UL requirements for the guarding of the saw blade on these products. UL indicated consumers often remove guards, which they believe interferes with cutting operations. The concept of holding a power tool users forum was discussed, as well as looking at after-market guards, and the improvements that they might offer.

Fire Safety Devices – Several products under this category were discussed. Regarding fire extinguishers, CPSC staff questioned the appropriateness of a new, March 1999 requirement, a UL test for Type K residential extinguishers which involves using a commercial vat of cooking oil in a deep fat fryer. UL staff indicated that it would review this matter. Regarding fire suppression towels, the next meeting of a standards development group will take place at a UL facility in the near future. Regarding escape ladders, it was noted that UL would be participating in the ASTM standards development activity, along with CPSC staff.

Sprinklers – CPSC staff voiced concerns regarding the adequacy of the UL listing program for sprinkler heads. The concerns included: elastomeric o-rings, metal-to-metal seals, corrosion tests, contaminants in the water, use of out-of-specification parts, dry pendent heads, and the inspection, testing and maintenance of sprinkler heads. There was a consensus that the CPSC technical staff and UL technical staff should meet on these issues in the near future.

**Kerosene (dyed)** – With red dye being added to kerosene intended for use in kerosene heaters to differentiate it from fuels for transportation vehicles, the CPSC concern expressed to UL was the possible emissions and fire safety resulting from the dye additive. UL is aware of this issue and will provide CPSC staff with a report on this matter.

Carbon Monoxide Detectors – CPSC staff reviewed a number of outstanding items with regard to the UL standard for these products. These included: the accuracy of digital displays, performance with interferent gases, long term reliability, test results from samples taken from the marketplace, and ways for consumers to distinguish models that meet upgraded requirements. UL responded to some of these items, and others will be addressed in the near future. UL indicated that, except for the two models that have been recalled, the other units obtained from the marketplace conformed to the UL test requirements.

**Portable Electric Heaters** – CPSC staff indicated that they are currently evaluating portable electric heaters purchased this past heating season for potential fire hazards. This work is being done in order to assess the effectiveness of requirements in the UL standard that were upgraded in the early 1990's. The work is scheduled for completion by October.

Fixed Room Heaters – CPSC staff informed the UL staff that these electric heaters, which include baseboard heaters, recessed wall heaters, and floor drop-in heaters, would be the focus of a general evaluation in FY 2000, including the adequacy of the applicable voluntary safety standard. CPSC staff will obtain samples from the marketplace.

Ground Fault Circuit Interrupters (GFCIs) – CPSC staff expressed an interest in having UL recognize the safety improvements being developed by GFCI manufacturers. These enhancements included a reset lockout feature if the GFCI electronic circuits are malfunctioning, and indicating lights to provide the installer with positive feedback when receptacle GFCIs are improperly wired during installation. UL staff requested that CPSC staff provide them with a letter outlining our request.

Plastic Appliance Materials – In light of the UL letter of April 9, 1999, indicating that additional time was needed for UL to consider comments received regarding UL 746C proposals, CPSC staff indicated to the UL staff at the meeting that the proposed revisions to UL 746C were important for safety. The CPSC staff requested that UL staff keep them advised regarding any deviation from the planned upgrade.

General – The CPSC staff thanked the UL staff for this opportunity to exchange information on the status of safety activities of mutual interest. The meeting was adjourned at approximately 3:30 pm.